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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,375	01/29/2004	Naomichi Akizuki	B-5365 621682 - 9	7894

7590 07/17/2007
Richard P. Berg, Esq.
c/o LADAS & PARRY
5670 Wilshire Boulevard, Suite 2100
Los Angeles, CA 90036-5679

EXAMINER

PHILIPPE, GIMS S

ART UNIT	PAPER NUMBER
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2621

MAIL DATE	DELIVERY MODE
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07/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/769,375	Applicant(s) AKIZUKI ET AL.	
	Examiner Gims S. Philippe	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/19/04, 04/26/05</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

This is a first office action in response to application no. 10/769,375 filed on January 29, 2004 in which claims 1-8 are presented for examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burt et al. (US Patent no. 5,999,662) in view of Korobkin (US Patent no. 6,912,293).

Regarding claims 1 and 2, Burt discloses a system for automatically generating a continuous developed still image from a video image of an object photographed while moving in the axial direction of the tubular object (See Burt col. 1, lines 23-30), and col. 4, lines 58-64), the system comprising digital image data capturing means for capturing video image data as digital image data from a recording medium having recorded thereon the video image data (See Burt col. 4, lines 30-40 and col. 15, lines 7-14); mosaic processing means for subjecting the developed diagram of each of the frames created by projection converting means to mosaic processing, to convert it into

continuous and seamless developed still image data (See Burt col. 4, lines 31-52); image data compressing means for compressing the developed still image data (See Burt col. 5, lines 25-35); and compressed image data storing means for storing the compressed image data obtained by compressing the developed still image data (See Burt col. 14, lines 61-67); wherein the mosaic processing means is of a type for cutting out and stitching strips of the developed diagram of each of the frames (See Burt col. 7, lines 40-47 and col. 15, lines 7-20).

It is noted that although Burt proposes creating panoramic view or region of an area of interest (See Burt col. 5, lines 1-24), it is silent about the video image of an inner wall and a pipe projection converting means for creating a developed diagram in the circumferential direction of the inner wall of the tubular object with respect to each of frames of the captured digital image data.

However, Korobkin proposes generating video image of an inner wall and a pipe projection converting means for creating a developed diagram in the circumferential direction of the inner wall of the tubular object with respect to each of frames of the captured digital image data (See Korobin fig. 4(a), 4(b), 6(a) and 12(e), and col. 30, lines 51-60).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Burt's mosaic processing step by incorporating Korobin's step of generating video image of an inner wall and a pipe projection converting means for creating a developed diagram in the circumferential direction of the inner wall of the tubular object with respect to each of frames of the

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captured digital image data. The motivation for performing such a modification in Burt is to facilitate the construction of 3D models of a scene or object depicted in a sketch or photograph while creating virtual image of the of the physical objects in a physical scene as taught by Korobin (See Korobin col. 1, lines 36-63).

As per claims 3-8, most of the limitations of these claims have been noted in the above rejection of claims 1-2.

It is noted that Burt is silent about providing a tubular image of a tunnel or a pipe when generating the continuous developed still image from the video image.

However, Korobin discloses providing a tubular image of a tunnel or a pipe when generating the continuous developed still image from the video image (See Korobin fig. 7, 12 (c) to 12(f) as the claimed tunnel, and fig. 4(a) representing the claimed pipe).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Burt mosaic processing step by incorporating Korobin's tubular image of a tunnel or a pipe when generating the continuous developed still image from the video image. The motivation for performing such a modification in Burt is to be able to produce media presentation while reading the scene graphs data structure and composing a visual representation as taught by Korobin (See Korobin col. 8, lines 6-27).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Kumar et al. (US Patent no. 6522787) teaches method and systems for rendering and combining images to form a synthesized view of a scene containing image information from a second image.

Geng (US Patent Application Publication no. 2005/0089213 A1) teaches method and apparatus for three-dimensional modeling via an image mosaic system.


Bernier (US Patent Application Publication no. 2004/0169663 A1) teaches systems and method for providing enhanced vision imaging.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S. Philippe whose telephone number is (571) 272-7336. The examiner can normally be reached on M-F (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dastouri Mehrdad can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Gims S Philippe
Primary Examiner
Art Unit 2621

GSP

July 11, 2007